EXPLANATION OF PLATE X. Figs. 1, 1 *a*, 1 *b*.

Fig. 1. *Euphanerops longævus*, gen. et sp. n.; the more complete side of the fossil and its counterpart (1 *a*), nat. size, with scale (1 *b*) enlarged ten times. — Upper Devonian; Scaumenac Bay, Province of Quebec, Canada. [British Museum.]

c., caudal fin; *d.*, dorsal fin; *o.*, orbits.

LVI.—*On a new Species of* Deltodus *from the Lower Carboniferous* (*Yoredale Rocks*) *of Yorkshire.* By A. Smith Woodward, LL.D., F.L.S.

[Plate X. figs. 2, 2 *a*, 2 *b*.]

The dental plates of some of the Palæozoic Cochliodont sharks attain a considerable size, but those referable to the genus *Deltodus*, as defined in the British Museum Catalogue, have not hitherto been remarkable in this respect. A new specimen, presented to the British Museum by the Rev. Addison Crofton, M.A., is therefore of much interest as showing that at least one species of *Deltodus* rivalled the largest species of some allied genera in size. This fossil was discovered by the donor in a dark-coloured limestone of the Yoredale Series on Blackthorn Farm, between Long Preston and Slaidburn, North Yorkshire. It is shown of three quarters the natural size from the oral and attached faces and from the hinder aspect in Pl. X. figs. 2, 2 *a*, 2 *b*.

This dental plate is much inrolled at the attenuated outer margin; it is thus of the form commonly assumed to belong to the lower jaw. If it be truly lower, it is the hinder dental plate of the left mandibular ramus. Its curvature is not directly at right angles to the long axis of the ramus, but very oblique, so that the antero-lateral margin (*a.*) is much longer than the postero-lateral margin (*p.*). Its outer inrolled portion is obscured by the matrix, but the inner margin (*i.*) is well preserved and seen to be gently sinuous. Its maximum transverse measurement at the inner margin is 0·06 m. The coronal surface is only gently convex and the small hinder wing of the plate is not sharply defined by any depression or flattening. The upper functional portion is crossed by eight or nine rounded and sinuous furrows, between each two of which the crown is slightly raised into a

blunt nearly median eminence. The lower and more newly formed portion of the dental plate is marked with less distinct transverse furrows, which gradually become more closely approximated near the inner margin. The greater part of the fossil is broken away from the matrix, thus exposing its inner face (fig. 2 *a*). This is roughened by small irregular ridges radiating from the attenuated outer end to the comparatively wide inner margin.

Compared with this new fossil all the European species of *Deltodus* hitherto known are very small and readily distinguished both by the shape of the dental plate and its superficial furrows. Nor do any forms of *Deltodus* from the Carboniferous of North America appear to resemble very closely the specimen now described *. Perhaps *Deltodus propinquus*, from the Coal Measures of Illinois, exhibits most similarity, though this is marked by slight cross-grooves cutting the transverse furrows, while its hinder wing is more distinctly defined. The dental plate from the Yoredale Rocks of North Yorkshire may therefore be regarded as the type of a new species, *Deltodus Croftoni*, named in honour of its discoverer.

EXPLANATION OF PLATE X. Figs. 2, 2 *a*, 2 *b*.

Fig. 2. *Deltodus Croftoni*, sp. n.; hinder left lower dental plate, oral and attached (2 *a*) faces and postero-lateral margin (2 *b*), three-quarters nat. size.—Lower Carboniferous (Yoredale Rocks); Blackthorn Farm, Long Preston, N. Yorkshire. [British Museum, no. P. 8697.]

a., antero-lateral margin; *i.*, inner margin; *p.*, postero-lateral margin.

LVII.—*Rhynchotal Notes.*—IV. Heteroptera: Pentatominæ (*part.*). By W. L. Distant.

[Concluded from p. 397.]

Genus Brachycoris.

Brachycoris insignis, sp. n.

Head and pronotum black, very coarsely punctate and rugulose; head with two small central spots near base and pronotum with three transverse spots near anterior area ochraceous. Scutellum ochraceous, sparingly but coarsely punctate

* For complete bibliography see Catal. Foss. Fishes Brit. Mus. pt. i. (1889) pp. 195–201.